



Collider-Accelerator Department Worker Occupational Safety and Health Committee

Date: December 19, 2003
To: WOSH Committee and Guests
From: P. Sparrow, A. Piper
Subject: Minutes for 12/16/03 - WOSH Committee Meeting

Members: L. Ahrens, M. Bannon*, J. Carlson, J. Cupolo*, D. Derryberry, F. Dusek, D. Graham*, J. Guercio, E. Koropsak, J. Laster, C. Liaw, D. Meany, B. Mullany, J. Nicolellis*, A. Piper, S. Pontieri, M. Sardzinski, T. Shrey*, L. Snyderstrup*, P. Sparrow*, D. Steski*, L. Vogt*, D. Weiss, D. Lazarus, R. Zapasek*.

(* denotes not in attendance)

Guests: E. Lessard, R. Karol

E. Lessard, led this meeting by identifying the meetings agenda and respective speakers. In addition, members were informed that they would be viewing an OSHA inspection compliance video to provide feedback on the value of the video and to assist in identifying the appropriate target audience within C-A.

E. Lessard reviewed the following topics: [Please view attachment for meeting slides]

1. C-A Injury/Illness/First Aid recordable data for FY03 was provided to members.
2. C-A Occurrence Reduction Trend Data was reviewed.
3. C-A Critiques performed in the 4th quarter of CY03 were reviewed.
4. An overview of the 2003 OSHA visit was presented including the following topics:
 - C-A OSHA Findings
 - Classification of findings
 - Detailed summary of findings
 - C-A Action Policy to address OSHA findings
 - Detailed Electrical safety improvement actions
 - Overview of the current Tier 1 process
 - Detailed tier 1 improvement actions
 - Recommendations/Close out strategy's

Ray Karol reviewed the following topics:

1. C-A efforts to address safety for employees during inclement weather including:
 - Purchasing snow shovels for emergency use.
 - Requesting sand barrels to be placed in key areas (due to union issue's, this request was denied by Plant Engineering).
 - Review of shoe covers which assist in walking in slippery conditions.

A. Piper reviewed the following topic:

1. Presented the committee with a 40-minute OSHA compliance video to obtain feedback from the committee on the appropriate target audience within C-A for this training video.
2. Requested comments from the committee on the video

Closing Meeting Comments:

1. Members of the committee expressed dissatisfaction with the level of snow/ice removal in the C-A complex during the recent snowstorm.
2. Members expressed positive feedback regarding the OSHA compliance video stating that the target audience should be supervisors and building managers at a minimum.

Copy to:

Hauser, J

Karol, R.

Kirk, T.

Lessard, E.

Lowenstein, D.

McNerney, A.

Passarello, D.

Pile, P

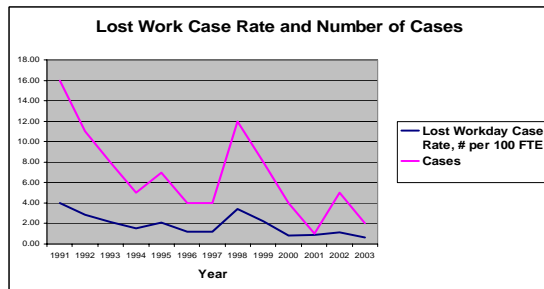
Roser, T

Sandberg, J.

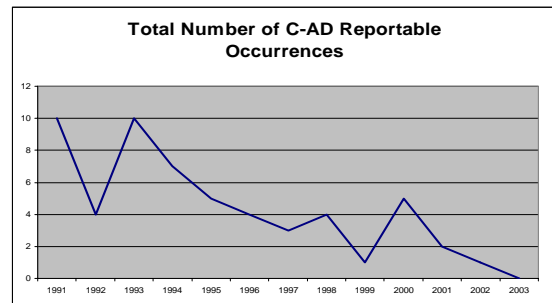
Tuozzolo, J.

WOSH Committee Members

Injury / Illness Trend



Occurrence Reduction



FY03 C-AD Occupational Injuries

- First aid cases: 11 (19)*
- Recordable cases: 3 (9)
- Lost Work Cases: 2 (5)
- C-AD LWCR is 0.66 per 100 FTE
- DOE LWCR is 0.7 per 100 FTE

*(FY02)

Critiques

- AGS Main Magnet Water Spill, 10-13-03
- PHENIX Vacuum Chamber Damage, 11-5-03
- Tolytriazole Excursion at RHIC Tower 7, 12-03-03

2003 OSHA Visit

- OSHA found 7000 non-compliances lab-wide, about 450 buildings, of which 33% were associated with C-AD's 120 buildings
- Many of the non-compliances cited by OSHA were not recognized as non-compliances (~50%) by the Laboratory's authorities having jurisdiction or these non-compliances had DOE approval for a variance (possible root cause)

Number of C-AD Findings versus BNL Classification

975	Quick Fix – No engineering necessary and cost is under \$2000
494	Technical – Cost is under \$2000
31	Capital Improvement – Cost is over \$2000
7	Maintenance – Typical maintenance is required to resolve this issue
0	Programmatic – Modifications need to be made to a program subject area
4	Training – Training issues need to be resolved
1	Unsafe Act – Resolve the cause that contributed to this act

Action Philosophy

- Address all findings (~1500 findings recorded by BNL)
- Action priority is based on importance of risk and hazard level as well as cost to mitigate
- One "unsafe act" was found and immediately addressed; a step ladder was being used as a straight ladder
- Significant risk items found (% of total):
 - gas cylinders unsecured or improperly stored (6%)
 - crane sling, rail, controls, sheaves, bumper, brake or inspection deficiencies (5%)
 - machine guards, broken missing or dirty (4%)
 - inadequate fall protection (0.8%)
 - chemical storage deficiencies (0.8%)

Summary of Electrical Safety Issues (Listed as % of ~700 Electrical Safety Issues)

• Obstructed or unreachable disconnects	35%
• Disconnects unlabeled	17%
• Temporary wiring used where permanent wiring should be installed	14%
• Mechanically unprotected power cable at less than 8 feet	13%
• Ungrounded refrigerators, metal lamps, fans and heaters	6%
• Light-duty power strips for heavy loads or power strip overloaded	3%
• Modified or broken disconnect boxes	2%
• Cable not in tray	2%
• Damaged wiring and damaged wiring not tagged out of service	1%
• Outlet or power feed within 6 feet of sink or eyewash, no GFCI	1%
• Overloaded cable trays	1%
• Improper cables in tray or S cord used in tray	0.6%
• Outlet not fixed to wall	0.6%
• Power strips daisy chained	0.4%

Electrical Safety Improvement Actions

- Ask C-AD supervisors to remove temporarily stored items away from disconnects and breaker panels (R. Karol, 12-15-03)
- Train technicians, engineers and electricians regarding the proper use of temporary wiring and require them not to use temporary wiring where permanent wiring should be installed (T. Nehring, 1-1-04)
- Track temporary wiring installations and issue actions items to remove or convert to permanent wiring (A. Pendzick, 1-1-04)
- Ask for an interpretation by the Laboratory Electrical Safety Committee (LESC) regarding (J. Sandberg, 1-1-04):
 - the need to protect cables from mechanical damage at heights less than 8 feet
 - the label requirements for breakers and disconnects
 - the clearance requirements in front of and to the sides of reachable disconnects
 - the need to allow certain existing disconnects to continue to be obstructed by large fixed obstructions

Electrical Safety Improvement Actions for Labeling Disconnects

1. Modify OPM 13.6.2 to state that an ECN is required prior to issuing a work order for all work on the power distribution system (D. Passarello, 1-1-04)
2. Create a drawing or a sketch and print a label or panel directory with the work order (T. Nehring, 1-1-04)
3. Modify the Work Order systems and C-A Group work planning systems to add a place for the work supervisor to sign indicating that all labeling was completed (T. Nehring, A. Pendzick and J. Sandberg, 1-1-04)
4. Update OPM 2.28, C-A Procedure for Work Planning and Control for Operations to reflect the enhanced electrical work practices at C-AD; that is, incorporate recommendations 1, 2 and 3 above as work-planning requirements (P. Cimigliaro, 1-1-04)
5. Assign electricians to label existing disconnects for a few hours each week (T. Nehring, on-going)

Current C-AD Tier 1 Team

- Tier I Team includes the following members:
 - Chairperson, ESHQ Division Head
 - ES&H Coordinator
 - RCD Facility Representative
 - RCD Radiological Controls Technician
 - ESWMD Environmental Compliance Representative
 - Electrical Engineer
 - Quality Assurance Manager
 - Work Controls Manager
 - Environmental Coordinator
 - Quality Assurance Specialist
 - Water Services Group Technician
 - Electrical Specialist from EF&S Division
 - Three Chief EE representatives
 - Two Chief ME representatives

Current Tier 1 Status

- Four members of the Tier I Team have been trained in the OSHA 10-hour course
- In the last month, three other members of the Tier I Team have been trained in the OSHA 30-hour course
- Normally, a Tier I Team consists of 5 to 10 people and lasts 1.5 to 2 hours each week
- In addition to the Tier I Team, the responsible supervisor for the location is notified
- Building Managers and supervisors rarely participate
- Findings are written up and action items are documented in the C-AD Family ATS

Trends/Causes of OSHA Deficiencies

- A review of the Tier I team member training shows the Department needs to expand OSHA training to all of the Team members
- Tier I Team members must include and must mentor Building Managers and supervisors during a safety inspection
- Failure to require participation encourages non-compliance

Recommendations

- The specific non-compliances cited by OSHA for the C-AD buildings should be developed into a one-hour training program with appropriate photographs and an explanation of the basis of each type of non-compliance
- A "what's wrong with this picture" type of training program is recommended for C-AD staff
- Based on the ILO-OSH management system at C-AD, we should increase worker involvement in safety inspections
 - A safety-walk by workers should be implemented to review a specific job-site each week
 - The aim of the weekly safety-walk should be to increase worker involvement and to familiarize the workers with specific OSHA requirements
- Involve more managers in Tier 1

Tier 1 Improvement Summary

- Increase the OSHA training of the Tier 1 Team members. Attendance at a 30-hour or 10-hour OSHA course is required for every Team member (R. Karol, 6-1-04)
- Prepare a training course based on the findings of the recent OSHA inspections. Present the course to C-AD Building Managers and supervisors every two years (J. Maraviglia, 2-15-04)
- Implement a safety-walk program to review a specific job-site each week (A. Piper, 1-1-04)
- Recruit more managers for participation in C-AD Tier 1 (R. Karol, 1-1-04)

Closing-Out Strategy

- Distribute each OSHA Inspection Field Observation Record to the responsible C-AD Building Manager. Have the Building Managers address the easily-fixed items. Request engineering evaluations to determine the cost of the remaining items (R. Karol, 1-1-04)
- Collect the OSHA Inspection Field Observation Records back from the Building Managers and have the Building Managers identify items not easily fixed. Assign a responsible person to disposition each item and a due date using C-AD Family ATS (D. Passarello, 2-15-04)